AMENDMENTS TO THE CLAIMS

1 – 5 (Cancelled).

6. (Currently Amended) A ~~computer-implemented~~ method of detecting privilege escalation vulnerabilities in a pre-existing source code listing, said source code listing having a listed sequence of expressions, each expression including a set of operands and operators to transform values of the operands, said source code listing further having routine calls, said routine calls including arguments with which to invoke a routine, said source code listing being stored in computer readable medium having computer executable instructions, wherein a privilege escalation vulnerability is an uncontrolled escalation of system privileges that allows unauthorized access to system resources, the ~~computer-implemented~~ method comprising:

~~executing computer instructions to provide~~ providing a list specifying routines that potentially cause privilege escalation vulnerabilities;

~~executing computer instructions to provide~~ providing pre-specified ranges of values for arguments of routines in the list that cause privilege escalation vulnerabilities;

~~executing computer instructions to analyze~~ analyzing the source code listing to identify calls to routines specified in the list;

~~executing computer instructions to analyze~~ analyzing the source code listing to semantically analyze arguments of the identified routine calls to determine routine calls that possess privilege escalation vulnerabilities using the pre-specified ranges of values; and

~~executing computer instructions to generate~~ generating a report that identifies the vulnerabilities.

7. (Currently Amended) The method of claim 6 wherein ~~executing computer instructions to~~ semantically ~~analyze~~ analyzing the arguments of the identified routine calls comprises analyzing the

source code listing to create computer models of the arguments, each model specifying a range of values that each corresponding argument can take when the source code listing is executed~~, said argument models being stored in computer memory~~.

8. (Currently Amended) The method of claim 7, wherein analyzing the source code listing to create computer models of the arguments comprises:

analyzing the source code listing to create computer models of said operands, each of said operand models specifying a range of values of each corresponding operand as a result of operand transformations expressed in the source code listing~~, said models being stored in computer memory~~; and

using the operand models to create the argument models.

9-11 (Cancelled).